

**CHAMPION<sup>®</sup>**

3-30 HP | RECIPROCATING AIR COMPRESSOR

**PL-Series**





Experience **Proven Results**  
with Champion—the Leader in  
Durability, Reliability & Efficiency

# Customized Solutions Proven Dependability

## A Winning Combination

Champion compressors are proven units, known for their reliability over decades of use. We know our products and understand how they operate in many different operating environments. No matter the application, Champion gets the job done.

## The Solution to Your Application

Champion PL-Series pressure lubricated compressors have a time-tested, proven design. Rugged standard features, a wide selection of configurations, and quality available options make the PL-Series compressors the solution to your application. They deliver high performance, long life and tremendous value. Champion compressors are the proven choice.





## Pressure-Lubricated PL-Series

The PL-Series compressor has been designed to operate in extreme duty applications. Because the PL-Series can operate up to 250 psi, and run in off-level operations, it is a true industrial use compressor. The PL-Series features domed pistons, integral cylinder head, disc valves, and an oil pump that provides lubricant to all crucial parts of the compressor. From its extra heavy duty design to its ease of maintenance, the Champion PL-Series exemplifies reliability, durability, and quality.

### Pressure Lubrication

Crankshaft and connecting rod bearings are pressure lubricated for extended life.

### Oil Pressure Gauge

Mounted on the front of the compressor for an excellent view and easy pressure monitoring.

### Loadless Starting

Hydraulic unloader with factory set pilot valve provides easy, loadless starts and low oil pressure protection for unattended operation.

### Lubricant Filtration

An external spin-on oil filter and an internal oil inlet screen protect internal components from damaging debris.

### Babbitt Bearings

Replaceable bearing makes repairs easy and inexpensive.

### Positive Displacement Oil Pump

Provides lubricant to all critical areas of the compressor pump that require lubrication.

# It's All in the Details



Disc valves provide minimized blow-by and industry proven long life



Needle bearings minimize friction between wrist pin and connecting rod



PL-15A



Aluminum body molded over a cast iron sleeve, good heat transfer and durability  
\*PL-15 & PL-30 only



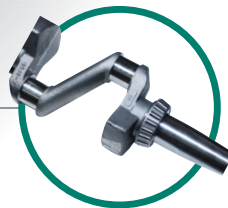
Domed pistons for greater compressor efficiency—"hemi" design



PL-30A



Tapered roller bearings for long life and trouble-free operation



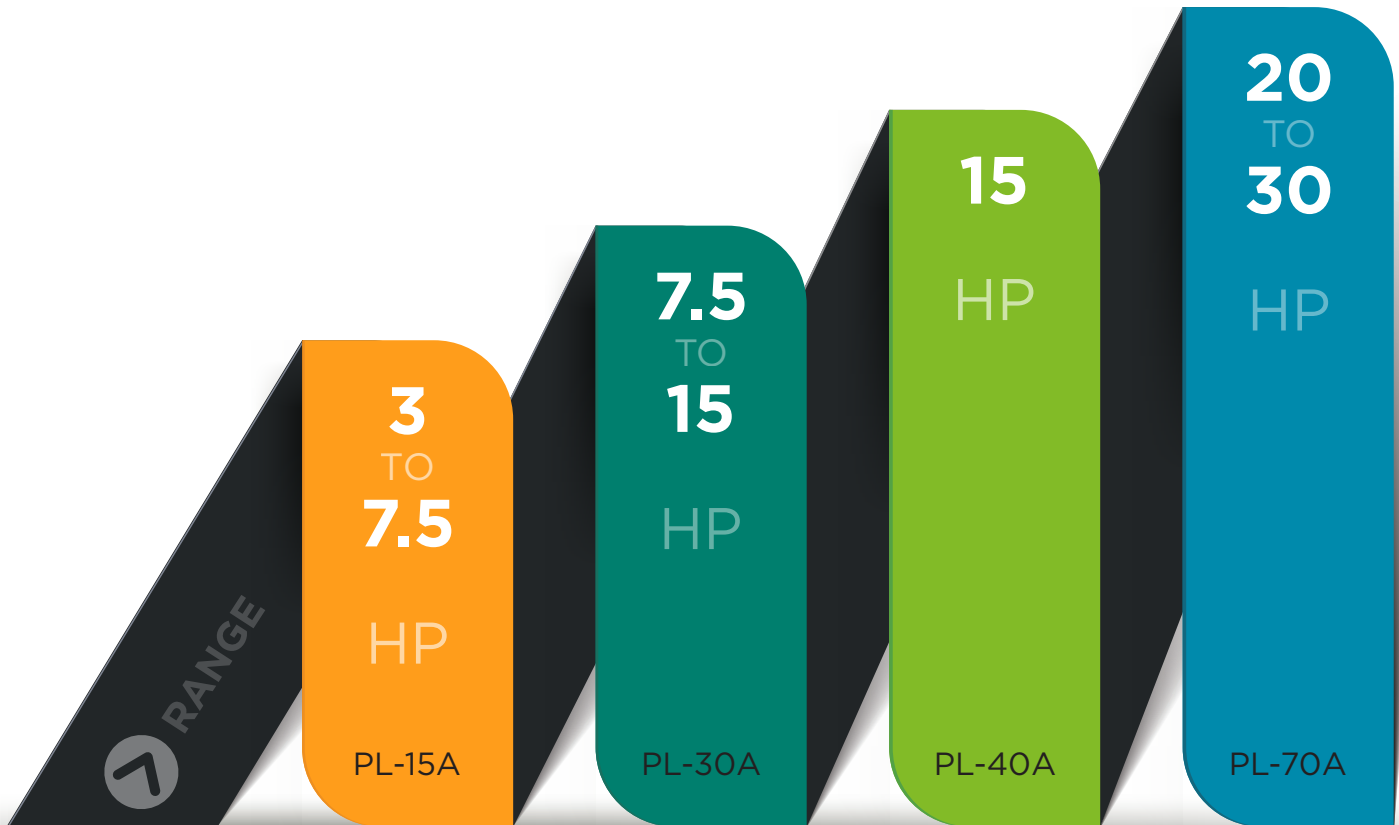
Automotive style double-throw (balanced and counterweighted) crankshaft provides optimum compressor performance



ASME inter-stage pressure relief valve for protection

# PL-Series

# OVERVIEW



SIMPLEX\*

**9.7-23.1**  
CFM @ 175 PSI

**440-980**  
RPM

**25.8-46.3**  
CFM @ 175 PSI

**566-1035**  
RPM

**53.7**  
CFM @ 175 PSI

**770**  
RPM

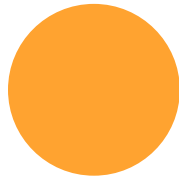
**77.5-101.0**  
CFM @ 175 PSI

**655-890**  
RPM

\*Double CFM values for Duplex Units (Duplex not available in 3 HP)



PL-40A



PL-70A



PL-15A



PL-30A

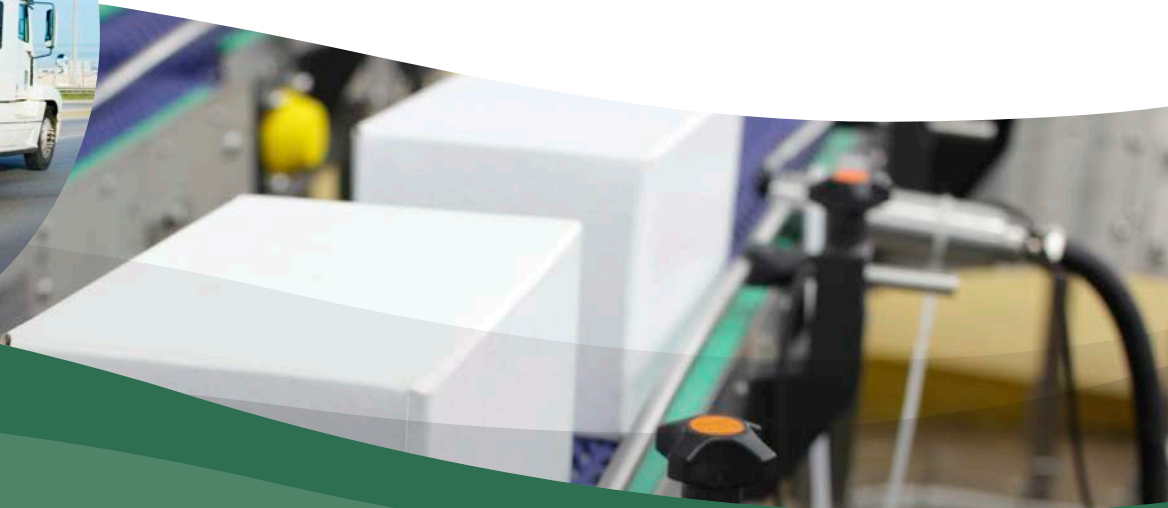
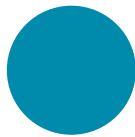
# Complete Compressor Packages

## Standard Features

- Load-less starting (via hydraulic unloader) for lower energy costs and less wear on drive motor
- ASME inter-stage pressure relief valve for protection
- ODP NEMA 1760 RPM electric motor
- 10 Micron industrial grade intake filter
- ASME coded receiver
- 0-300 PSIG air pressure gauge on tank
- Available voltages
  - Single phase—115/208-230
  - Three phase—208/230/460/575
- Mounted Control Panel
  - Test/Off/Auto Switch
  - Hour Meter

## Available Options

- Multiple tank sizes and variations
- Electric or engine driven
- NEMA 4 full-voltage starter upgrade
- TEFC motor upgrades
- NEMA 4 control panel upgrade
- Air-Cooled Aftercooler
- Low oil stop control (NEMA 1 or 4)
- Low oil pressure switch (NEMA 1 or 4)
- Vibration isolators
- Synthetic lubricant
- Food-grade lubricant
- High temperature switch (NEMA 1 or 4)
- Automatic tank drain
  - Electric







### Control Panel

Provides thermal overload protection, and transformer provides reliable low voltage output to the auxiliary components. Includes TOA Switch and Hour Meter.



### Air-Cooled Aftercooler

The factory mounted, heavy duty, air-cooled aftercooler effectively reduces up to 65% of the moisture from discharged compressed air.



### Automatic Tank Drain

Electric timed drain provides concise control of condensate management.



### Vibration Isolators

Isolates the compressor unit from the foundation or floor. Reduces noise and protects the unit from any out-of-level floor situation that could cause vibration and damage.

### Other Options

- NEMA 4 rated parts available
- Alternate voltages and TEFC electric motors

## Complete Your Package with **Quality Accessories**

Many options are available to help you develop a Champion compressor package that exactly matches your specific operating requirements.

### Low Oil Stop Control

Low oil stop control shuts down the unit when oil levels are below an adequate level. Prevents the unit from restarting until oil level has been restored.



### Refrigerated Air Dryer

Cools compressed air to a 33–39° dew point, eliminating additional downstream condensation in the air line. Normally, a dryer should be used in conjunction with an aftercooler. Other refrigerated and desiccant dryer types are available.



### Low Oil Pressure Switch

The LOPS (low oil pressure switch) shuts down the unit if the oil pressure falls below an adequate level.



### Champion Compressor Lubricants

ChampLub lubricants are blended specifically for Champion compressors for use in harsh compressor environments. They are enhanced with carefully selected additive packages to provide long life and superior protection. ChampLub lubricants are suitable for a variety of applications and are available as a mineral oil, synthetic or food-grade synthetic.



# Convenience & Peace of Mind

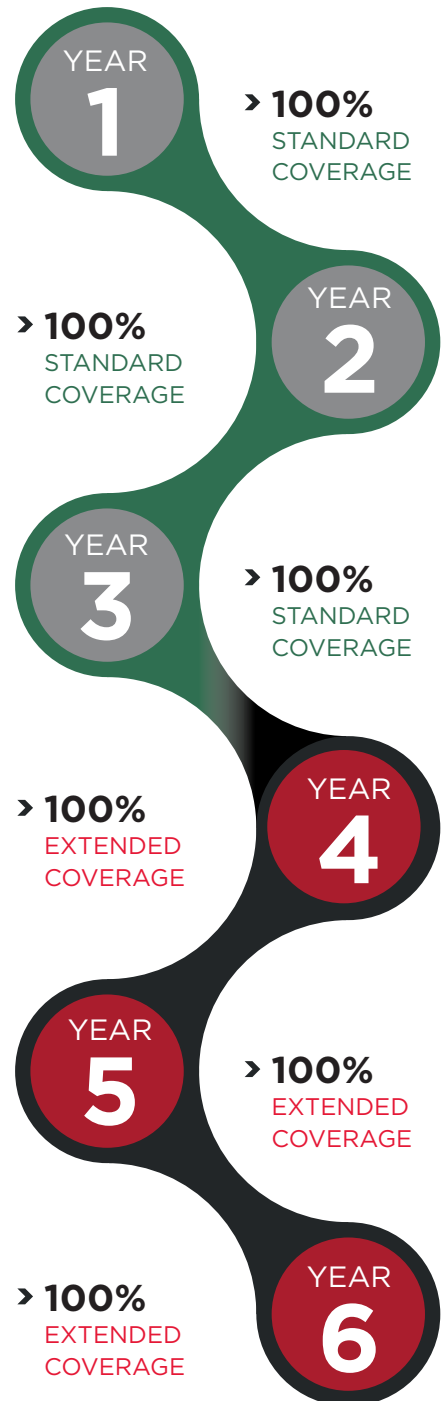
## Standard Warranty

The standard warranty covers parts and labor on the package components for one year and three years on the compressor pump.

The Champion philosophy ensures long-lasting, reliable equipment. Our warranty program demonstrates our confidence in our products.

Each new Champion assembled unit has a 3 year warranty on the compressor pump against defects in materials of workmanship under normal use and service.

\*See standard warranty form BU-31 for complete standard warranty details.



## Premium Extended Warranty

Purchase a Premium Warranty Kit at the same time as your new Champion compressor package to receive extended warranty protection. This offer will double the coverage with an additional 3 years of warranty on the compressor pump (parts & labor) providing 6 YEARS of worry free coverage. The Premium Extended Warranty also provides an extra 12 months coverage on the package for a total of 24 months. See Premium Warranty form BU-28 for complete extended warranty details.

- \* Premium Warranty kit has all necessary service items (oil & filters) for 6 years of annual maintenance.
- \* The use of approved Champion lubricants are required to maintain the extended warranty period.
- \* Duplex machines require two kits, one for each pump.



# Sales & Service **Distributors** Across America

## **An Extensive Network**

Your sales, service and technical support needs will be handled quickly and easily by our extensive network of Champion factory-trained, authorized local distributors. Maintaining and adequately servicing your compressor has never been easier.



Over **1,100** Champion distributors ready to provide solutions to all your compressed air needs

To find a distributor visit:  
[www.championpneumatic.com](http://www.championpneumatic.com)

# Pump Model PL-15A

## PL-SERIES | 3-7.5 HP RECIPROCATING COMPRESSORS

MOTOR HP	TANK CAPACITY GAL.	HORIZONTAL TANK MOUNTED			VERTICAL TANK MOUNTED			125 PSI RATING		175 PSI RATING		250 PSI RATING	
		PL-SERIES MODELS	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	PL-SERIES CBSPLA	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	RPM	CFM DEL'Y	RPM	CFM DEL'Y	RPM	CFM DEL'Y
3	-	BPL3	38 x 25 x 30	230	-	-	-	485	10.9	440	9.7	380	8.0
3	30	HPL3-3	43 x 31 x 44	416	-	-	-	485	10.9	440	9.7	380	8.0
3	60	HPL3-6	52 x 23 x 49	509	VPL3-6	35 x 32 x 77	509	485	10.9	440	9.7	380	8.0
3	80	HPL3-8	67 x 32 x 49	574	VPL3-8	35 x 33 x 76	574	485	10.9	440	9.7	380	8.0
3	120	HPL3-12	71 x 32 x 54	746	VPL3-12	35 x 36 x 76	746	485	10.9	440	9.7	380	8.0
5	-	BPL5	38 x 25 x 30	280	-	-	-	764	19.1	730	16.2	643	13.6
5	60	HPL5-6	43 x 31 x 44	432	-	-	-	764	19.1	730	16.2	643	13.6
5	60	HPL5-6	52 x 32 x 49	525	VPL5-6	35 x 32 x 77	525	764	19.1	730	16.2	643	13.6
5	80	HPL5-8	67 x 32 x 49	590	VPL5-8	35 x 33 x 76	590	764	19.1	730	16.2	643	13.6
5	120	HPL5-12	71 x 32 x 54	762	VPL5-12	35 x 36 x 76	762	764	19.1	730	16.2	643	13.6
5 (x2)	80	HPL5D-8	67 x 32 x 50	755	-	-	-	764	38.2	730	34.6	643	27.2
5 (x2)	120	HPL5D-12	72 x 33 x 54	980	-	-	-	764	38.2	730	34.6	643	27.2
7.5	-	BPL7F	38 x 25 x 30	310	-	-	-	986	23.9	980	23.1	817	18.2
7.5	80	HPL7F-8	51 x 32 x 49	630	VPL7F-8	35 x 33 x 76	630	986	23.9	980	22.1	817	18.2
7.5	120	HPL7F-12	71 x 32 x 54	802	VPL7F-12	35 x 36 x 76	802	986	23.9	980	22.1	817	18.2
7.5 (x2)	120	HPL7DF-12	72 x 33 x 54	1150	-	-	-	986	47.8	980	46.2	817	36.4
7.5 (x2)	250	HPL7DF-24	88 x 35 x 61	1485	-	-	-	986	47.8	980	46.2	817	36.4

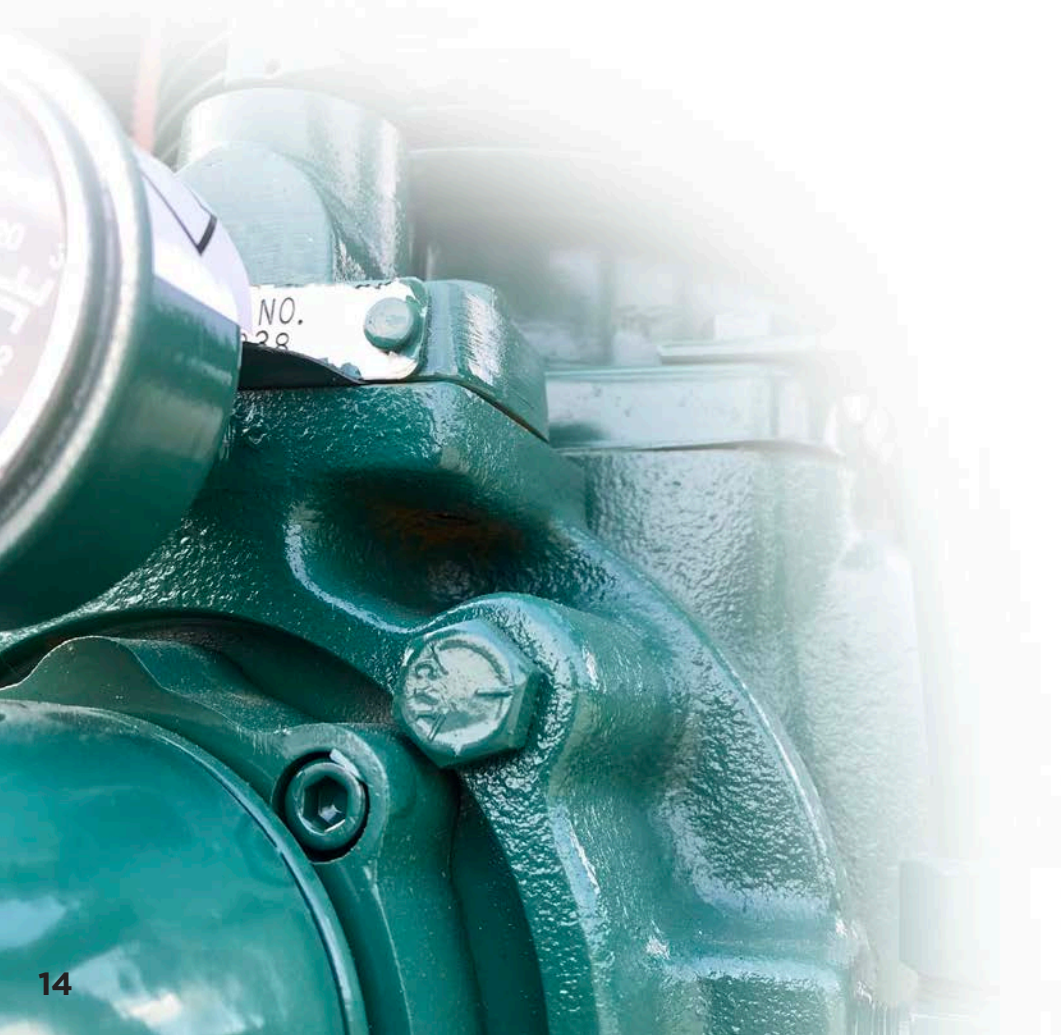
Simplex CFM values are doubled for duplex units. Duplex units have two motors and two pumps on one tank.

# Pump Model PL-30A

## PL-SERIES | 7.5-15 HP RECIPROCATING COMPRESSORS

MOTOR HP	TANK CAPACITY GAL.	HORIZONTAL TANK MOUNTED			VERTICAL TANK MOUNTED			125 PSI RATING		175 PSI RATING		250 PSI RATING	
		PL-SERIES MODELS	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	PL-SERIES CBSPLA	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	RPM	CFM DEL'Y	RPM	CFM DEL'Y	RPM	CFM DEL'Y
7.5	-	BPL7	43 x 26 x 29	430	-	-	-	635	30.0	566	25.8	531	21.3
7.5	80	HPL7-8	51 x 32 x 49	763	VPL7-8S	43 x 38 x 64	710	635	30.0	566	25.8	531	21.3
7.5	120	HPL7-12	71 x 32 x 54	882	VPL7-12	43 x 37 x 76	882	635	30.0	566	25.8	531	21.3
7.5 (2)	120	HPL7D-12	72 x 33 x 54	1305	-	-	-	635	60.0	566	51.6	531	42.6
7.5 (2)	250	HPL7D-24	88 x 35 x 61	1675	-	-	-	635	60.0	566	51.6	531	42.6
10	-	BPL10	43 x 23 x 29	540	-	-	-	810	39.5	740	33.8	640	27.5
10	80	HPL10-8	67 x 26 x 50	776	VPL10-8	43 x 30 x 67	723	810	39.5	740	33.8	640	27.5
10	120	HPL10-12	71 x 26 x 53	895	VPL10-12	43 x 30 x 81	895	810	39.5	740	33.8	640	27.5
10	250	HPL10-24	89 x 31 x 60	1249	N/A	N/A	N/A	810	39.5	740	33.8	640	27.5
10 (2)	120	HPL10D-12	71 x 26 x 53	1725	-	-	-	810	74.6	740	69.6	640	55.0
10 (2)	250	HPL10D-24	89 x 31 x 60	2325	-	-	-	810	74.6	740	69.6	640	55.0
15	-	BPL15F	43 x 23 x 29	550	-	-	-	1035	50.2	1035	49.0	900	42.6
15	120	HPL15F-12	72 x 33 x 55	1017	VPL15F-12	43 x 30 x 81	898	1035	48.8	1035	46.3	900	41.0
15	250	HPL15F-24	88 x 33 x 61	1371	N/A	N/A	N/A	1035	48.8	1035	46.3	900	41.0
15 (2)	120	HPL15DF-12	88 x 34 x 54	1860	-	-	-	1035	100.4	1035	98.0	900	85.2
15 (2)	250	HPL15DF-24	88 x 34 x 61	2460	-	-	-	1035	100.4	1035	98.0	900	85.2

Simplex CFM values are doubled for duplex units. Duplex units have two motors and two pumps on one tank.



# Pump Model PL-40A

## PL-SERIES | 15 HP RECIPROCATING COMPRESSORS

MOTOR HP	TANK CAPACITY GAL.	PL-SERIES MODELS	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	125 PSI RATING		175 PSI RATING		250 PSI RATING	
					RPM	CFM DEL'Y	RPM	CFM DEL'Y	RPM	CFM DEL'Y
15	-	BPL15	50 x 28 x 38	730	890	59.2	770	53.7	700	45.8
15	120	HPL15-12	73 x 36 x 62	1210	890	59.2	770	53.7	700	45.8
15	120	HPL15-25	90 x 36 x 69	1564	890	59.2	770	53.7	700	45.8
15 (x2)	250	HPL15D-24	90 x 55 x 74	2460	890	118	770	107.4	700	91.6

Simplex CFM values are doubled for duplex units. Duplex units have two motors and two pumps on one tank.

# Pump Model PL-70A

## PL-SERIES | 20-30 HP RECIPROCATING COMPRESSORS

MOTOR HP	TANK CAPACITY GAL.	PL-SERIES MODELS	DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	125 PSI RATING		175 PSI RATING		250 PSI RATING	
					RPM	CFM DEL'Y	RPM	CFM DEL'Y	RPM	CFM DEL'Y
20	-	BPL20	58 x 33 x 40	1000	770	91.9	655	77.5	545	63.2
20	120	HPL20-12	73 x 33 x 65	1517	770	91.9	655	77.5	545	63.2
20	240	HPL20-24	90 x 33 x 71	1871	770	91.9	655	77.5	545	63.2
20 (x2)	240	HPL20D-24	90 x 67 x 77	2845	770	183.9	655	153.4	545	128.2
25	-	BPL25	58 x 34 x 40	1020	890	102.1	770	90.1	660	76.8
25	120	HPL25-12	73 x 34 x 65	1557	890	102.1	770	90.1	660	76.8
25	240	HPL25-24	90 x 34 x 71	1911	890	102.1	770	90.1	660	76.8
25 (x2)	240	HPL25D-24	90 x 67 x 77	2940	890	204.2	770	180.2	660	153.6
30	-	BPL30	58 x 33 x 40	1060	890	102.1	890	101	770	90.0
30	120	HPL30-12	73 x 33 x 65	1597	890	102.1	890	101	770	90.0
30	240	HPL30-24	90 x 33 x 71	1951	890	102.1	890	101	770	90.0
30 (x2)	240	HPL30D-24	89 x 67 x 78	3018	890	204.2	890	202	770	180.0

Simplex CFM values are doubled for duplex units. Duplex units have two motors and two pumps on one tank.

# Bare Pumps

## PL-SERIES RECIPROCATING COMPRESSOR

MODEL	# OF CYLINDERS	BORE DIA. INCHES	STROKE INCHES	OIL CAPACITY QUARTS	UNIT DIMENSIONS L x W x H INCHES	APPROX. SHIP WEIGHT LBS.	MINIMUM RPM	MAXIMUM RPM
PL-15A	2	4.63 & 2.5	3	2	20 x 17 x 23	135	375	1050
PL-30A	4	4.63 & 2.5	3	4	21 x 25 x 24	240	400	1050
PL-40A	2	6.25 & 3.25	4.5	4	28 x 30 x 32	460	425	1000
PL-70A	4	6.25 & 3.25	4	6.3	29 x 34 x 34	590	425	1000

Champion is committed to  
delivering **superior products** built with  
the **exceptional standards** you expect.

**CHAMPION**<sup>®</sup>

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